Amendments to the Claims

Claim 1. (Currently amended) A composition comprising a biodegradable polymer having a

ligand attached thereto, wherein said ligand is attached to said biodegradable polymer via an

anchor-adapter-tag unit comprising an anchor attached to or incorporated into the polymer and

through which the unit is retained on the polymer, a tag attached to the ligand, and an adapter

that links the anchor and the tag.

Claim 2. (Currently amended) A composition comprising a biomaterial architecture having a

ligand attached thereto through a biomolecular interaction, wherein said biomaterial architecture

comprises a biodegradable polymer having an anchor moiety incorporated therein or attached

thereto, and wherein said biomolecular interaction is effected by an anchor-adapter-tag unit

comprising the anchor, a tag attached to the ligand, and an adapter that links the anchor and the

tag, wherein the unit is retained on the polymer by the anchor.

Claim 3. (Canceled)

Claim 4. (Canceled)

Claim 5. (Canceled)

Claim 6. (Previously amended) The composition of claim 2, wherein the anchor is capable of

being incorporated into the polymer from which the biomaterial architecture is formulated, the

tag is capable of attachment to the ligand, and wherein the adapter is capable of binding to both

the anchor and tag moieties to generate an anchor-adapter-tag unit.

Claim 7. (Original) The composition of claim 2, wherein said biomaterial architecture

comprises a biodegradable polymer.

Claim 8. (Previously amended) The composition of claim 2, wherein said anchor is

Attorney Docket No.: 0492611-0335

Client Reference: MIT 8070

incorporated into the polymer.

Claim 9. (Previously amended) The composition of claim 2, wherein said polymer is poly(lactic

acid)-co-poly(ethylene glycol) (PLA-PEG).

Claim 10. (Previously amended) The composition of claim 2, wherein said biodegradable

polymer is selected from the group consisting of polymers of poly(hydroxy acids),

polyanhydrides, polyorthoesters, polyphosphazenes, polyphosphates, polycaprolactone,

polyhydroxybutyrates, polyesters, polyamides, polysaccharides, and polyproteins.

Claim 11. (Previously amended) The composition of claim 2, wherein the anchor and tag each

comprise biotin and the adapter comprises avidin or streptavidin.

Claim 12. (Currently amended) The composition of claim 2, wherein the anchor and tag

comprise the same or different hapten, and the adapter comprises an antibody having the

required specificity for the hapten(s).

Claim 13. (Previously amended) The composition of claim 2 or 66, wherein said ligand is

selected from the group consisting of peptide, protein, carbohydrate, nucleic acid, lipid,

polysaccharide, inorganic molecule, organic molecule, and combinations thereof.

Claim 14-17. (Canceled)

Claims 18-54. Canceled)

Claims 55-63. (Canceled)

Claim 64. (Canceled)

Claim 65. (Previously added) The composition of claim 2, further comprising a therapeutic

agent, wherein said therapeutic agent is formulated with the polymer to generate a biomaterial

Attorney Docket No.: 0492611-0335

Client Reference: MIT 8070

architecture having a therapeutic agent encapsulated therein.

Claim 66. (Previously amended) The composition of claim 2, further comprising a therapeutic

agent, wherein said therapeutic agent is a ligand attached to the biomaterial architecture through

a biomolecular interaction.

Claim 67. (Previously added) The composition of claim 2, wherein said biomaterial architecture

comprises a particle.

Claim 68. (Previously added) The composition of claim 2, wherein said biomaterial architecture

comprises a nanosphere or microsphere.

Claims 69-72. (Canceled)

Claim 73. (Previously added) The composition of claim 2, wherein said biodegradable polymer

is a copolymer of a polymer selected from the group consisting of poly(hydroxy acids),

polyphosphazenes, polyphosphates, polycaprolactone, polyanhydrides, polyorthoesters,

polyhydroxybutyrates, polyesters, polyamides, polysaccharides, and polyproteins.

Claim 74. (Currently amended) The composition of claim 2, wherein said biodegradable

polymer is a blend of any of the polymers selected from the group of polymers consisting of

poly(hydroxy acids), polyanhydrides, polyorthoesters, polyphosphazenes, polyphosphates,

polyhydroxybutyrates, polyesters, polyamides, polysaccharides, and polycaprolactone,

polyproteins.

U.S.S.N. 09/314,540 3516356_1.DOC

Page 6 of 14

Attorney Docket No.: 0492611-0335 Client Reference: MIT 8070